

UNIVERSITY OF FLORIDA

Bureau of Economic and Business Research

TRENDS IN THE INDUSTRIAL AND CCCUPATIONAL COMPOSITION OF THE LABOR MARKET IN THE CAPE KENNEDY AREA

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(not for release)

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TRENDS IN THE INDUSTRIAL AND OCCUPATIONAL COMPOSITION OF THE LABOR MARKET IN THE CAPE KENNEDY AREA

The major question to be examined in this report is the effect of the space program of the federal government on industrial and occupational trends in the labor market of the Cape Kennedy region. To what extent have the federal programs in the area altered the industrial composition of the labor market? Did the trends evident from 1940 to 1950 continue from 1950 to 1960? Were the trends in the industrial composition of the labor market uniform in all counties? Did new industries spring up during the 1950's which changed drastically the industrial composition of the labor market? Did the growth or decline of individual industries remain unchanged during this period? If changes did occur, to what extent can they be attributed to the space program of the federal government? A similar set of questions may be raised regarding the occupational composition of the labor market.

Changes in the Industrial Composition of the Labor Market

From 1940 to 1950, the number of employed persons in the seven-county region increased by 43.9 per cent, as compared with an increase of 47.7 per cent for the State of Florida. However, as Table 1 indicates, employment in the region increased by a remarkable 104.4 per cent in the region from 1950 to 1960, as compared with 70.3 per cent for the state. The number of employed persons in the region increased by 33,672 from 1940 to 1950 and by 115,211 from 1950 to 1960.

Percentage Changes in the Number of Employed Persons by Industries for Florida and the Seven-County Region, 1940-50, 1950-60. Table 1.

	State	te	Reg	Region	Brevard	ard	Indian	15		Lake
	1940- 1950	1950- 1960	1940- 1950	1950- 1960	1940 - 1950	1950-	1940-	1950-	1940-	1950-
Total	47.7%	70.3%	43.9%	104.49	37.8%	381.5%	32.5%	79.6%	46.0%	41.5%
Agriculture Forestry and Fisheries	5.5	-11.1	18.7	1.0	3.6	-16.6 -62.8	-3.4	-17.9	39.5	5.8 -46.5
Mining ^l Construction	103.0	45.7 73.6	53.5	153.0	36.9	1.7.7	153.8	102.3	121.4	83.3
Manufacturing Transportation	35.2 51.2	107.6 77.1	47.1 76.0	291.7 81.2		2,218.0 259.6	24.8	43.0	70.1	08.4 08.4 08.4
Trade Wholesale	72.7	37.5 35.4	54.5 37.1	108.6 15.9	52.3 18.7	203.7 18.6	. 9 . 0 . 0 . 0	93.8 84.9	68.0 4.0	00.00 4.00.00
Retail	75.3	61.6	62.6 75.8	93.8	53.8 84.3	276.4	80.1 51.4	97.1 222.0	57.9 53.3	3.0 125.8
Finance Services (other) Private households	67.5	. 46 60 60 60 60 60	-19.4 -19.5	120,8	-15.8	546.1	54.3	126.6	12.8	55.5
	82.9	72.8	83.8	178.7	234.6	428.1	79.1	185.7	39.0	60.1
	Ore	Orange	Osceol	eola	Sem	Seminole	Volusia	isia		
	1940- 1950	1950 - 1960	1940 - 1950	1950 - 1960	1940- 1950	1950-	1940-	1950-		
Total	60.0%	113.8%	7.0%	73.0%	77.4%	70.6%	45.6%	56.3%		
Agriculture Worestry and Fisheries	10.0 0.0	32.8	0.6	18.1	-6.7 -47.4	-27.8 38.0	25.6	-22.4		
	1	1	!	, ;	10	1 / 0	1 (; ;		
Construction Mommfootuning	7.44.1 86.8	138.9	12.4	139.4 81.2	168.6	296.1 197.6	138.2 46.2	56.7 113.1		
Transportation	800	103.1	10.0	84.9	20.9	68.3 27.6	51.7	30° y		
Trade Wholesale	53.9	95.5	-18.8	96.8 8.8	-18.0	-10.01	81.6	121.2		
Retail	71.7	84.9	45.4	67.8	37.7	104.8	φ. 6	62.0		
Finance (cthes)	00 00 01 01	147.3	104.0	79.4 13.1	73°C	317.1	10.04	67.0		
Services (Comer) Private households	-13.5	18.7	-25.1	118.3	-36.2	114.8	25.5	18.1		
Administration		187.8	31.3	57.0	TO GENERAL	the small	numbers	Pmn loved	in the	industry.
data Ior the	_	Ω				3		no fortimo		
Source: U.S. Census.								•		

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Changes in employment in particular industries in the region were just as startling as the change in total employment. From 1940 to 1950, the number of employed persons increased in nine of eleven major industrial groupings. The percentage increase in the number of employed persons was greater for the region than for the state in agriculture, contract construction, manufacturing, and transportation, communication and other public utilities. On the other hand, the percentage increase in the number of employed persons was smaller for the region than for the state in mining, trade, finance, and services other than private household. The percentage increase was about the same for the region and the state in public administration. Employment in forestry and fisheries declined more in the state than in the region, while in private household work it declined more in the region than in the state.

Significant changes in these relationships occurred from 1950 to 1960. The number of persons employed in forestry and fisheries continued to decline, but now the decline was greater in the region than in the state. Employment in agriculture, which had increased 18.7 per cent from 1940 to 1950 in the region, increased only 1.0 per cent from 1950 to 1960 while agricultural employment in the state was decreasing by over 11 per cent. All the other major industrial groupings showed greater increases in the number of employed persons in the region from 1950 to 1960 than from 1940 to

1950. The increases were phenomenal in several cases. In manufacturing the percentage increase in employment during the 1950's was 291.7 per cent, as compared with 47.1 per cent during the 1940's. In public administration the contrasting percentages were 178.7 and 83.8. Furthermore, a long-run decline in private household employment was reversed during the 1950's, when employment in this field increased 53.3 per cent.

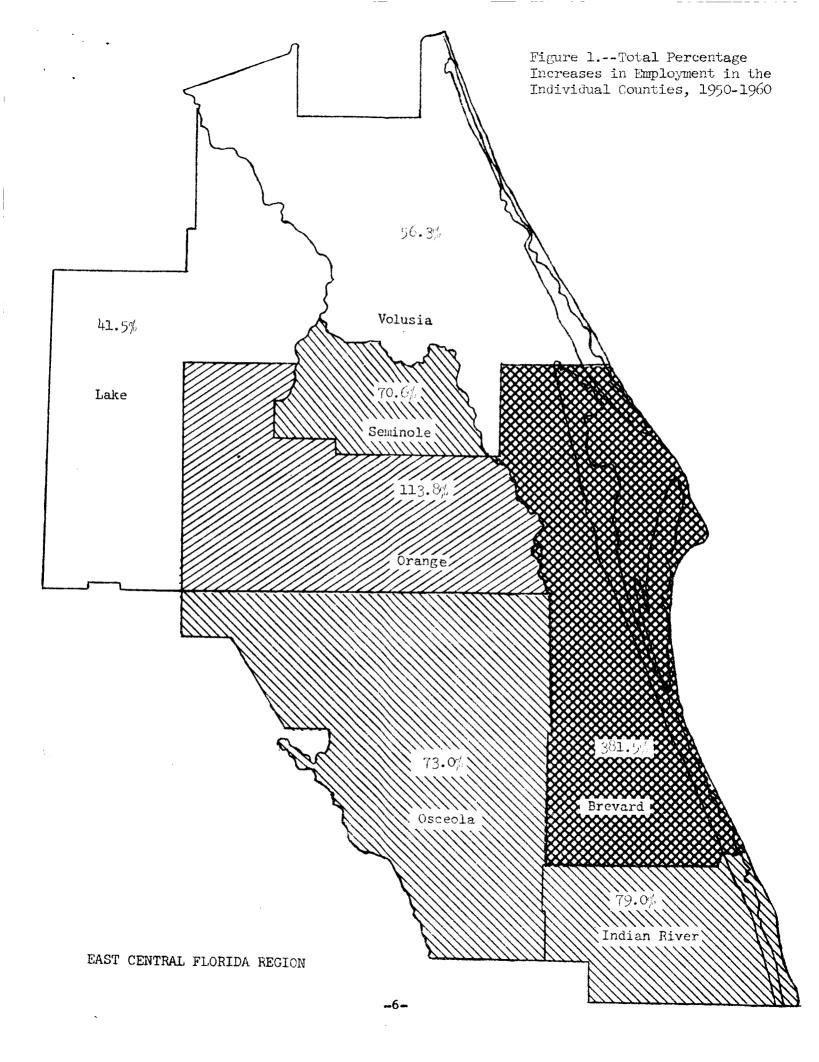
From 1950 to 1960 the percentage increase in the number of employed workers was greater for the region than for the state in mining, construction, manufacturing, trade, private household work, services, public administration, transportation, and finance. Some of the differences were striking. For example, manufacturing employment increased 107.6 per cent in the state and 291.7 per cent in the region; in trade the percentages were 37.5 for the state and 108.6 in the region; and in public administration they were 72.8 for the state and 178.7 for the region. On the other hand, employment in transportation and finance increased only slightly more rapidly in the region than in the state.

Significant differences existed among the individual counties in both of the periods under discussion with respect to changes in total employment and changes in industrial structure. From 1940 to 1950 the percentage increase in the number of employed persons in Brevard, Indian River, Osceola, and Seminole was smaller than that for the region which, as has been indicated, was smaller than that for the state as a whole. Lake and Volusia had percentage increases in employment which were greater than that for the region but less than

that for the state. Only Orange County had a percentage increase in employment which was greater than those of both the region and the state.

In contrast, Brevard, Orange, and Indian River had percentage increases in employment which were greater than that for the state from 1950 to 1960. Osceola and Seminole, which had shown the smallest percentage increases in employment of the counties in the region from 1940 to 1950, had percentage increases which were about the same as that for the state from 1950 to 1960. Lake and Volusia, on the other hand, had percentage increases in employment which were smaller than that for the state during the 1950's. It is also noteworthy that, with the exception of Lake County, all of the counties in the region had larger percentage increases in employment from 1950 to 1960 than from 1940 to 1950. Thus the trend toward increased employment in the counties which was shown in the 1940's was accelerated during the 1950's.

Although all of the counties experienced an increase in the number of employed persons from 1950 to 1960, the amount of increase varied considerably. Orange County had the largest absolute increase in the number of employed persons and Brevard County the largest relative increase. In Orange County the net increase in the number employed amounted to 49,653, or a rise of 113.8 per cent. In Brevard County the relative rise was 381.5 per cent and the absolute increase 31,552. The total percentage increases in employment which occurred in the various counties from 1950 to 1960 are shown geographically in Figure 1.



Together Orange and Brevard Counties accounted for 70.6 per cent of the net increase in the number of employed persons in the region between 1950 and 1960. Volusia County, which ranked third in terms of the absolute increase in the number of employed persons, accounted for 13.0 per cent of the net increase in employment in the region. The smaller counties, on the other hand, produced only 16.4 per cent of the net increase in employment in the region during this period. This does not mean, however, that the increases in employment opportunities which these smaller counties experienced during the 1950's were insignificant to their economies. Just the opposite was true.

The changes in the industrial compositions of the counties also merit attention. In Orange County, where employment increased 113.8 per cent from 1950 to 1960, the rates of increase in employment in mining, manufacturing, transportation, finance, private household work, services, and public administration were greater from 1950 to 1960 than they had been from 1940 to 1950. Even agricultural employment increased, though the rate of increase was smaller than it had been in the 1940's. And, although employment in the construction industry did not increase as much in the 1950's as it had during the 1940's, still the rate of increase was far over 100 percent. From 1950 to 1960 the largest increases in employment within manufacturing occurred in the fields of fabricated metals (ordnance), electrical machinery, and food and kindred products. The first two of these are associated with the federal programs and the last with the traditional agricultural industry of the area - citrus fruits.

In Brevard County, the rising trend of agricultural employment of the 1940's was reversed from 1950 to 1960. The decline in employment in forestry and fisheries continued from 1950 to 1960.and employment in this industry became insignificant. Although employment increased in mining during the period, this industry amounted to little for it employed only 28 persons even in 1960. The explosive effects of the economic development of the county are suggested by the great increases in the rates of increase in employment in the other industries. For example, the rate of increase for manufacturing employment was 50.7 per cent from 1940 to 1950, but it was 2,218.0 per cent from 1950 to 1960. Employment in the service industry outside private households increased by 65.4 per cent from 1940 to 1950, but it increased by 546.1 per cent from 1950 to 1960. Very large but somewhat less dramatic increases occurred in construction, transportation, trade, finance, private household work, and public administration.

The total increase in the number of persons employed in the industries which have been considered to be linked to the space program - fabricated metals, electrical machinery, transportation equipment, professional and related services, and public administration - accounted for over 40 per cent of the total net increase in employment in the county from 1950 to 1960. This indicates at least roughly the significance of the federal programs to the economic development of the county.

Volusia County experienced a much lower rate of growth than either of the other two major counties from 1950 to 1960. Although the rate of increase in employment in the 1950's was higher than it

Employment in agriculture, which had been rising during the 1940's, declined during the 1950's. Employment in forestry and fisheries and in mining, which were relatively unimportant to the county in 1940, were even more insignificant by 1960. The rate of increase in employment from 1950 to 1960 was lower than it had been from 1940 to 1950 in the fields of construction, transportation, trade, and finance, and for public administration it remained about the same. Only the fields of manufacturing, private household work, and services experienced increased rates of growth in employment. Even here, however, only one industry, manufacturing, had a growth rate in excess of 100 per cent for the decade. The industries most directly related to the space program accounted for roughly 25 per cent of the net increase in employment in the county from 1950 to 1960.

The four smaller counties present a mixed picture. Agricultural employment declined in the 1940's and in the 1950's in Indian River County and Seminole County. It increased from 1940 to 1950 in Lake County, and also from 1950 to 1960 but at a slower rate. It merely held its own in Osceola County during the 1940's but it increased significantly during the 1950's. Employment in private households, which declined in all four counties from 1940 to 1950, increased significantly from 1950 to 1960.

In Indian River County the rate of increase in employment was greater from 1950 to 1960 than it had been in the previous decade in manufacturing, transportation, trade, finance, services, and

public administration. The same situation prevailed in Seminole County, except that the construction industry was added to the list. From 1950 to 1960 the largest increases in employment in Indian River County occurred in manufacturing, finance, and public administration, while in Seminole County they took place in finance, construction, and public administration.

In Osceola County, construction, manufacturing, transportation, trade, services, and public administration all had higher growth rates for employment from 1950 to 1960 than in the previous decade. The highest rates from 1950 to 1960 were in construction, transportation, and manufacturing. The situation in Lake County was different, as only finance and public administration showed higher growth rates from 1950 to 1960 than from 1940 to 1950. This county, which is more distant from Brevard County, the seat of the Cape Kennedy complex, than any other county in the region, seemed to be least affected by the development of the space program.

The extent to which the industrial structure of the counties in the region has been affected by the development of federal programs is suggested, though not measured precisely, by the available data. The sub-industries which are most directly related to the federal programs are fabricated metals, electrical machinery and equipment, and transportation equipment other than motor vehicles. In some other cases (as, for example, contract construction, professional and related services, and public administration), the relationship is there but it is not quite so direct and clear.

Much, but not all, of the building program in the area has been the result of the expansion of facilities used by the federal government and the construction of facilities for contractors who service the federal programs. In similar fashion, the expansion of the number of workers in the field called "professional and related services" is in part a result of the development of the NASA activities, for this category includes employees of specialized firms in engineering and other work which have contracts with federal agencies or with firms which in turn have governmental contracts connected with the space program.

In the case of public administration, some of the increase in employment can be attributed to the direct expansion of federal programs in the area, and another part to the expansion of state and local governmental programs which resulted from the development of federal activities. Although precise limits cannot be determined as to the effects of federal programs on economic activity in general and employment in particular in the various counties, some insights can be derived from an analysis of the data presented in Table 2.

The first industries to be considered are fabricated metals, electrical machinery and equipment, and transportation equipment other than motor vehicles. In 1950 fewer than 300 persons were employed in the fabricated metals field, but the number had increased by 11,438 by 1960. Orange County ranked first in the number employed, Brevard County second, and Seminole County third. Orange County accounted for 59.4 per cent of the increase in the number employed in the region, Brevard County for 30.5 per cent, and Seminole County for only 4.5 per cent.

Changes in Number of Employed Persons by Occupation, 1950-1960, For Region and Counties. Table 2.

				101	o de card	a Copy of	Seminole	Volusia
	Region	Brevard	Indian Kiver	Take	Orange			
				Na	Number			
,			2 703	4 5 QL	49.653	2,435	7,181	15,003
Total	115,211	34,12	2, (7)	1111			•	,
	Ċ	C	740-	916	1,652	96	-855	-458
Agriculture	101	מאא י	- CC-	04-	-125	-14	19	-155
Forestry and Fisheries	7460	77-	24 6	2 0	75	a	CI	12
	101	10	000	860	5,622	954	1,599	1,647
uction	14,084	3,472	+ 59 Co.	101	11,760	362	1,312	5,049
50	25,834	7, 300 1,00	27.	107	6,788	260	517	188
etal Ind.	11,438	3,430 4,138	16	19	832	†₹	145	283
	17.67						4	900
Equip, and supplies	1,180	519	140	8	148	31	1	z30
Trans. Equip. cacacacac	•			7	,	ç	god	169
Food and kindred products	2,719	305	154	- 34	1,900	18	176	319
Printing, Publishing and	1,277	210	ጽ	23	<u>}</u>	ì	-	
Allied Products	מני(01-	C 1	-151	-73	99-	-31	\$ 1
Furniture, Lumber and	(74-	21	ļ	`				
Wood Products	טטנ	411.1	66	235	2,405	118	530	599
Transportation, Communication,	OPT 60		`	3	•			1
and Jublic Utilities	02.1	1, 275	1.078	1.783	8,130	515	954	3,735
Trade	2,4,0	(1) ()	315	900	815	8	024-	180
Wholesale	0000	165	763	1.557	7,315	423	1,424	3,555
Retail	20267	, C.	150	000	266	55	183	616
Eating and drinking places		y 6	7) o	376	3,132	81	650	808
Finance, Insurance & Real Estate	0,211	י. ממני	24.7	101	1,573	194	527	383
Private Households	4,103	1,020	88.1	1 089	6,269	331	1,539	4,088
Services, excluding Private	24,630	(,433	100	, , .	12-61)	•	
Households	820 (1	129.6	505	#6	6,178	762	993	2,493
Professional and related	7,365	2,693	286	223	2,817	98	622	630
Public Administration Occupations not reported	7,592	1,607	125	329	3,384	202	707	16067
							Continued.	nued

Changes in Number of Employed Persons by Occupation, 1950-1960, For Region and Counties (continued) Table 2.

			7				
•			Fer Cent	or keglonar	Increase		
Total	84°LZ	3.3%	4.8%	43.2%	2.1%	6.2%	13.0%
Agriculture	ţ	1 1	1	;	;	;	1
Forestry and Fisheries	;	;	!	1	1	i	1
	15.8	22.8	11.9	33.8	2.0	2.0	11.9
Construction	24.5	3.1	6. 2	39.9	3.5	11.4	11.7
Manufacturing	36.2	က ့် လ	1.6	45.5	7.1	5.1	7.9
Fabricated Metal Industry	30.5	0.5	1.2	59.4	2.3	4.5	1.6
Electrical Machinery, Equip.	75.9	0.3	0.3	15.2	7.0	2.7	5.2
and supplies					,		
Transportation Equipment,	44.1	11.9	5.2	12.5	2.6	3.7	20.0
Excluding Motor Vehicles					•	,	,
Food and kindred products	11.1	5.7	1	70.2	†• 0	5. 2	e . 5
Printing, Publishing, and	16.4	3.0	3.0	37.4	1.4	13.8	25.0
Furniture, Lumber and Wood	1	1	•	;	1	;	;
	,			-		•	
Transportation, Communication,	21.8	1.9	4.6	47.3	۳. م	10.4	11.7
SUG FUDILC ULLILLES	(t	0	(1	0
ान्येe	80°,	درون		٠٠ ٠٠	۲۰۶) • †	2.01
Wholesale	8.7	•	17.8	64.3	7•3	;	14.2
Retail	21.7	0.4	8,1	38.1	2.2	↑• }	18.5
Eating and drinking places	30.0	& •	& &	30•3	1.7	5.6	18.8
Finance, Insurance & Real Estete	14.8	•	6.1	50.4	1.3	10.5	13.0
Private Households	25.1	7.2	2.5	38°4	1.4	12.8	<i>د</i> .
Services, excluding private	30.2	•	† • †	37.7	1.3	e.2	16.6
households		,	,			,	!
Professional and related	19.0	3.6	6.7	و. م.	2.1	0. - 0	17.7
Public Administration	36.6	6°	0°°	38°2	1.2	4.8	ޕ8
Occupations not reported	21.2	1.6	4. 3	J•44	2.7	3.7	21.8

Developments in the field of electrical machinery and equipment followed a similar pattern. In 1950 fewer than 100 persons were employed in this industry in the region, but employment jumped by almost 5,500 by 1960. Brevard County ranked first and accounted for 75.9 per cent of the increase in employment, Orange county ranked second with 15.2 per cent, and Volusia County ranked third with 5.2 per cent. In transportation equipment other than motor vehicles, the expansion in employment was concentrated in Brevard, Volusia, and Orange, in that order, and to a lesser degree in Indian River. Thus the expansion in employment in these three industries from 1950 to 1960 tended to occur primarily in Brevard and Orange Counties, to a lesser extent in Volusia County, and to a very minor extent in the other counties.

Much the same pattern prevailed in regard to the expansion of employment in the construction industry, professional and related services, and public administration. Orange County accounted for 33.8 per cent of the increase in employment in the construction industry, Brevard County was second with 24.5 per cent, and Volusia and Seminole Counties third with about 11 per cent. In professional and related services, Orange County again was first with 43.9 per cent of the increase in employment, Brevard County was second with 19.0 per cent, and Volusia County was third with 17.7 per cent. In public administration, Orange County had the largest share of the increase in employment (38.2 per cent), Brevard County the next largest share (36.6 per cent) and Volusia and Seminole Counties came next with about 8 per cent each.

The domination of Orange County and to a lesser extent of Brevard County in the expansion of employment in the region from 1950 to 1960 appears also in other industries. Orange County accounted for 39.7 per cent of the increase of employment in trade, Brevard County for 20.9 per cent, and Volusia County for 18.2 per cent. Even in the expansion of employment in eating and drinking places, Orange County and Brevard County clearly dominated. The other counties benefited, to be sure, by the expansion of the federal programs in the area, but more through a "spill-over" effect than a direct effect. This "spill-over" effect will also show up in the occupational distribution of the populations of the counties.

The Occupational Composition of the Labor Force

The main question to be answered concerning changes in the occupational distribution of the employed in the seven-county region and in the counties may be stated as follows: To what extent do the changes reflect broad changes in the occupational distribution of workers in the state and to what extent are the changes uniquely related to economic developments in the Cape Kennedy region?

Between 1940 and 1950, the number of farmers and farm managers declined in the state but increased somewhat in the region, as shown in Table 3. And the number of farm laborers in the region increased by 21.3 per cent during this period, as compared with only 8.2 per

Percentage Changes in Occupational Distribution of Employed Persons for Florida, the Region, and the Counties, 1940-1950 and 1950-1960 Table 3.

	t	0+0+0			,	,		-1		
	Olor	1050	0,01	Countles Of	PIOLO	Hrevard	Indian	4		Lake
	1950	1960	1950	1960	1950	1960	1940-	1960	1940- 1950	1950- 1960
Total employed	47.74	70.3%	43.9%	104.4%	37.8%	381.5%	32.5%	79.0%	46.0%	41.5%
امسائمها	ű	0 211	Ó	000	,	1	1	:		,
The contract of the many of the contract) - - -	ハ t O T T	ひ・ ナ・ ハ・	7,00°,7	1.10	1,315.5	59.T	147.0	39.5	73.8
	- t - t	-##- ~~	ン, す,(-36.9	.1.3	-55.4	-7.5	-35.8	32.3	-47.5
Froprietors & managers, ex. F.	↑• †	2,40	62 . 3	100.3	61.2	304.3	69.1	110.7	63.0	63.6
Clerical & sales	87.7	97.9	79.5	144.0	101.0	561.4	101,1	128.4	65.0	80.9
Craftsmen and foremen	114.0	75.1	108.8	142.9	129.7	577.2	123.5	95.5	114.0	72.5
Operatives	54.7	59.4	50.2	75.9	31.8	269.8	49.2	102,1	89,3	3
Private household workers	-20.7	0.84	-26.8	63.8	-22.8	186.1	-26.7	115.9	-19.6	10.
Service workers, excluding				,			•			•
private household workers	47.3	74.1	42.2	105.9	62.0	335.0	4.64	145.0	30,3	76.8
Farm laborers	જ	-12.4	21.3	. 8.	1	43.0	\@ \@	70	, , , ,) (
Laborers, excluding farmers	9.3	21,3	13,1	58.0	7.7	7.70	7.44	£ 5	0 01	0,00
Occupations not reported	132.8	650.3	217.9	546.9	- 0	1,733,3	135.7	219.2	201.9	165.0
							· · · · · · · · · · · · · · · · · · ·	\ \ \		
	Ora	Orange	Osceola	ola	Sem	Seminole	Volusi	ısia		
	1940- 1950	1950-	1940-	1950-	1940-	1950-	1940-	1950-		
			-77-		2//=	-200	7270	7200		
Total	60.0%	113.8%	7.0%	73.1%	11.4%	70.6%	45.6%	56.3%		
Professional	80.7	192.3	36.3	2,66	54.1	167.4	61.7	70.7		
Farmers & farm managers	14.0	-24.0	-18.7	-24.5	-29.6	-25.0	11.7	- 45.3		
Proprietors & managers, ex. F.	75.4	100.5	13.7	56.8	25.3	118.3	63.3	, ,		
Clerical and sales	87.6	134.4	67.6	0.09	26.0	9,171	ر د د	, c		
Craftsmen and foremen	119.5	133.1	41.3	107.7	689	2.171	100	, 0 1 1		
Operatives	70.1	89.2	23.9	52.8		7,9%	, v	, o c		
Private household workers	-23.0	59.8	-33.7	155.7	30.0	1.96.	31.6	V -70		
Service workers, excluding	,		-)))) •	0	, ,		
private household workers	48.1	100.0	34.2	107.7	25.1	125.1	35.7	280		
Farm laborers	18.5	25.3	5.8	23,1	5.6	38.0	- 0	7.00		
Laborers, excluding farmers	9.44	80.8	-52.2	47.4	-12.7	59.9	ין יין ר	† -		
ions not reported	215.9	715.1	169.0	353.8	481.0	171.3	247.7	562.4		
Source: U. S. Bureau of the Cer	Census									

cent in the state. Although there was a tendency for the percentage increases to be greater for the state than for the region in clerical and sales occupations, operatives, service workers, and nonfarm laborers, the differences between the state and regional rates of increase were not significant. Similarly there was no important difference between the rates of decline in private household workers for the state and for the region in this period. On the other hand, the percentage increases were considerably smaller for the region than for the state in the number of professional and kindred workers and the number of proprietors, managers, and other officials.

When changes in the occupational distribution of the employed workers in the region from 1950 to 1960 are compared with the similar changes for the state as a whole, a different picture is seen. First, the trend toward increased employment of farmers, farm managers, and farm laborers in the region was reversed during the 1950's, though the percentage decline in the number of such workers was smaller for the region than for the state. Second, in all other occupations the region experienced much larger percentage increases in the number of persons employed than those which occurred in the state.

The occupations in the area which had the largest percentage increases in the number employed from 1950 to 1960 were professional and kindred workers (208.2 per cent); clerical, sales, and kindred workers (144.0 per cent); and craftsmen, foremen, and kindred workers (142.9 per cent). These occupations also showed the largest percentage

increases in the number employed for the state as a whole in this period, but the percentage increases were uniformly smaller for the state than for the region. The implication is that the region was subject to economic forces which were peculiar to that area, such as the space program, as well as to economic forces which operated throughout the state, such as the growth of tourism.

The analysis of trends in the occupational distribution of the labor force in the individual counties starts with the three major counties, Brevard, Orange, and Volusia. As indicated earlier, some occupations grew during both decades in the state as a whole, but grew at a faster rate from 1950 to 1960 than from 1940 to 1950. These occupations were the professional, clerical and sales, services other than private household, and nonfarm laborers. In Brevard and Orange Counties similar trends occurred in these occupations, but the growth during the 1950's was much greater than that which occurred during the 1940's and that which occurred in the state during the 1950's.

Brevard County from 1950 to 1960 had the largest percentage increases of any of the counties in the region in these occupations. The percentage increases were fantastic: 1,315.5 per cent for professional workers, 561.4 for clerical and sales workers, 335.0 per cent for service workers, and 124.7 per cent for nonfarm laborers. In Orange County the rates of growth were less striking but still considerably above those which prevailed in the state as a whole.

Volusia County, on the other hand, seemed to be less affected by the economic forces which produced these relatively high rates of growth. In all cases the rates of growth in Volusia County were lower than those for the state from 1950 to 1960 and, with the exception of service workers other than private household, were lower than those for the state from 1940 to 1950. In this exceptional case, the rate of growth in Volusia during the 1950's was somewhat higher than it had been in the previous decade.

Next to be considered are the trends in the occupations which increased at about the same rate in the state during the two decades or at a lower rate of growth from 1950 to 1960 than from 1940 to 1950. The occupations include craftsmen, foremen, and kindred workers; proprietors, managers and officials; and operatives and kindred workers. Again Brevard and Orange Counties experienced much higher rates of growth in these occupations in the 1950's than in the 1940's and higher rates than those which prevailed in the state in the 1950's. Brevard County had the highest rates of growth in these occupations in the region. Volusia County, on the other hand, had rates of growth in these occupations which were lower than those of the state in each decade and lower in the 1950's than in the 1940's.

The third group of occupational trends to be reviewed relate to private household workers, farmers and farm managers, and farm laborers. Private household employment declined at about the same rate from 1940 to 1950 in the state and in each of the three major counties. In the 1950's it increased in the state and in each county, but by varying

percentages. In Brevard County it increased 186.1 per cent, in Orange County 59.8 per cent, in the state 48.0 per cent, and in Volusia County 24.6 per cent.

Conflicting trends were present among the three counties in regard to employment for farmers and farm managers. In the state and in Brevard County the number declined in each decade and at a considerably higher rate in the 1950's than in the 1940's. In Volusia County a rising trend in the 1940's was reversed in the next decade, and the decline was greater in this county than in Orange County. Brevard County had the greatest decline of all. As for the number of farm laborers, in Brevard County there was only an insignificant increase from 1940 to 1950, whereas in the whole state and in Orange and Volusia Counties the number increased considerably. In the 1950's, Brevard County experienced a decline of 43.0 per cent, Volusia County a decline of 34.4 per cent, and the state a decline of 12.4 per cent. Orange County, on the other hand, showed an increase of 25.3 per cent -- a percentage increase greater than that of the 1940's.

We now turn to occupational trends in the four smaller counties in relation to those of the state. These counties experienced increases in the number of workers employed in the professional, clerical and sales, and service categories during the 1940's. This experience was in accord with that of the state, except that the percentage increases were in most cases smaller than those of the state. In the next decade the counties also had increased rates of growth with one exception. The exception was in Osceola County where the

<u> Labor Market</u>

number employed in sales and clerical work increased at a slower rate during the 1950's than in the 1940's. The overall trend toward increased rates of growth was in accord with the experience of the state. However, it is significant that the percentage increases for these occupations were higher than those at the state level in Indian River and Seminole Counties, as was the case in Brevard and Orange Counties.

The trend in the employment of nonfarm laborers in Indian River County followed a similar pattern in the two decades; that is, the percentage increase in the 1950's was greater than that of the 1940's and greater than that of the state. The other three counties experienced a decline in the number of nonfarm laborers employed during the 1940's, in contrast to the experience of the state. The trend was reversed in all three counties during the 1950's, but only in Seminole County was the percentage increase greater than that of the state.

From 1940 to 1950 and from 1950 to 1960 there was an increase in the state as a whole in the number of persons employed as non-farm proprietors, managers, and officials; craftsmen, foremen, and kindred workers; and operatives and kindred workers. In the first two classes, however, the percentage increase in the 1950's was smaller than that of the 1940's. In Indian River County, the percentage increase in the number of persons employed in each occupation was greater than that of the state from 1950 to 1960. In Seminole County the percentage increases in the number of proprietors and

managers and in the number of craftsmen and foremen were greater than those which occurred at the state level. On the other hand, the number of operatives in Seminole County had decreased during the 1940's and the increase in the 1950's was smaller than that for the state.

In Lake County, the number of workers in each occupation increased in each decade, but the percentage increase in the 1950's was about the same as or smaller than that which occurred in the 1940's and in each case was smaller than that of the state as a whole in the 1950's. In Osceola County the percentage increase in the number of workers in each occupation was greater in the 1950's than in the 1940's, but only in the case of craftsmen and foremen was the percentage increase greater than that for the state in the 1950's.

In private household employment the minor counties followed a pattern similar to that of the state. That is, the number of workers in this field declined during the 1940's and increased during the 1950's. In Indian River, Osceola, and Seminole Counties the percentage increase in the 1950's was greater than that for the state. In the same three counties, the number of farmers and farm managers declined in each decade, as in the state as a whole. The percentage decline in these counties in the 1950's was smaller than that for the state. In Lake County, an upward trend in the number of farmers and farm managers in the 1940's became a downward trend in the 1950's.

A similar reversal of trend occurred in Seminole County in relation to the employment of farm laborers. That is, the number of farm laborers increased during the 1940's but declined during the 1950's--a trend which was also present in the state as a whole. The number of farm laborers in Indian River County declined in both decades and at a more rapid rate in the 1950's than in the 1940's. In Lake and Osceola Counties, however, the number of farm laborers increased in each decade.

In summary, what may be concluded concerning the occupational trends in the counties? First, during the 1940's, the occupational trends in the counties were generally similar to those which occurred in the state as a whole, at least in regard to the direction of the changes. The percentage changes in the counties were usually smaller than those in the state. Orange County was really the only maverick, for it showed percentage changes which were about the same as those of the state and had an increase rather than a decrease in the number of farmers and farm managers.

Second, the whole situation changed somewhat during the 1950's. To be sure, the direction of the changes in employment in most occupations in the majority of the counties was the same as that at the state level. In Brevard County, however, the percentage changes were much larger than those in the state as a whole. This was true not only of the increases but also of the decreases in the number of farmers and farm laborers. Orange County also registered percentage increases in employment in the nonagricultural occupations which were substantially greater than those which occurred in the state.

Thus, Brevard and Orange Counties tended to stand apart from the other counties. Indian River and Seminole Counties, however, also showed percentage increases in employment in a number of occupations which were greater than either the increases at the state level or those which occurred in the remaining counties. These two counties seem to have been more subject to the "spill-over" effects of the economic developments in Brevard and Orange Counties than were the other counties.

The industrial and occupational changes in the counties account in part for differences among the counties in regard to the proportions of their populations aged 14 and over in the labor force in 1960. Brevard County had the largest proportion (59.3 per cent), Orange County was second with 56.8 per cent, and Seminole County third with 55.5 per cent. In all three counties the proportion of the population aged 14 and over in the labor force was greater than that for the state. In Indian River County, the proportion (50.3 per cent) was below that for the state, but higher than in Lake County (48.6 per cent), Volusia County (45.6 per cent), or Osceola County (42.8 per cent).